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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/616,415

07/08/2003

Ahmed H. Tewfik

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06/09/2005

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EXAMINER

CUMMING, WILLIAM D

ART UNIT

PAPER NUMBER

2683

DATE MAILED: 06/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/616,415

Applicant(s)

TEWFIK

Examiner

WILLIAM D CUMMING

Art Unit

2683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION***Information Disclosure Statement***

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

2. Waiver of the Copy Requirement in 37 CFR 1.98 for Cited Pending U.S. Patent Applications

37 CFR 1.98 requires that for each cited pending U.S. patent application, an information disclosure statement (IDS) include a legible copy of the application specification, including the claims, and any drawing of the application, or that portion of the application which caused it to be listed, including any claims, directed to that portion. See 37 CFR 1.98(a)(2)(iii).

The United States Patent and Trademark Office (USPTO) has been scanning newly filed patent applications and the existing inventory of patent applications into USPTO's Image File Wrapper (IFW) system since June of 2003. See Notification of United States Patent and Trademark Office Patent Application Records being Stored and Processed in Electronic Form, 1271 Off. Gaz. Pat. Office 100 (June 17, 2003). Applications stored in the IFW system may be viewed by examiners on their desktop computers. Consequently, there is no longer a need to require a copy of the specification, including claims, and drawings of a U.S. patent application (or portion of the application) listed on an IDS when the cited application is stored in the USPTO's IFW system, and can be readily viewed by examiners, applicants and members of the public.

Therefore, the requirement in 37 CFR 1.98(a)(2)(iii) for a legible copy of the specification, including the claims, and drawings of each cited pending U.S. patent application (or portion of the application which caused it to be listed) is *sua sponte* waived where the cited pending application is stored in the USPTO's IFW system. See 37 CFR 1.183. This waiver is effective immediately.

Applications filed under 35 U.S.C. § 111 on or after June 30, 2003, and international applications that have entered the national stage on or after June 30, 2003, have been or are being scanned into the USPTO's IFW system. When citing to a pending application filed under 35 U.S.C. § 111 before June 30, 2003, or that entered the national stage before June 30, 2003, the applicant may check

the private Patent Application Information Retrieval (PAIR) System to see whether the application is stored in the USPTO's IFW system in order to determine if a copy of the application (or portion of the application) is required to be provided with an IDS. The private PAIR System can be accessed over the Office's Internet Web site (www.uspto.gov).

When citing to a pending U.S. patent application that has been published under 35 U.S.C. § 122(b) (eighteen-month publication), the USPTO prefers that the citation be to the patent application publication (by publication number) rather than to the application itself (by application number).

This waiver is limited to the specification, including the claims, and drawings in the U.S. application (or portion of the application). If material other than the specification, including the claims, and drawings in the file of a U.S. patent application is being cited in an IDS, the IDS must contain a legible copy of such material. See 37 CFR 1.98(a)(1)(iv).

Inquiries concerning this notice may be directed to Jeanne M. Clark, Senior Legal Advisor, Office of Patent Legal Administration, at (703) 306-5603.

Specification

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

4. The abstract of the disclosure is objected to because of the implies phrases.

Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claim 1 is rejected under 35 U.S.C. 102(e) as being clearly anticipated by **Rodgers**.

Rodgers disclose a method for transmitting network data (figures 3-8) on a wireless network (figure 1) . The method comprising receiving a set of data. Determining a plurality of channels of a wireless network interface (figure 2) having at least two available channels and transmitting the set over the plurality of channels (*"A radio communication network 10 according to the present invention is shown in FIG. 1. The network 10 is a frequency hopping communication network wherein each of radios 20A, 20B . . . 20N transceive data with one another in a frequency hopping communication mode. Each radio includes a transmit/receiver (T/R) module 22 (22A,B, . . . ,N) for for transmitting data communications and for receiving data communications from another radio. In a frequency hopping mode of operation, a transmitting radio transmits information over a series of frequencies or frequency channels defining a frequency hop set. These frequencies may be a fixed set, or may change*

according to a time of day function, as is well known in the art. A receiver at a receiving radio is adapted to listen on those frequencies within a hop set and maintain synchronization with a transmitting radio for receiving the data communication transmitted over the hopping set of frequencies, so as to follow the frequency pattern in order to "demodulate" the data communication or information transmitted. In the present invention, as shown schematically in FIG. 2, a receiver portion 24 of T/R module 22 for each radio 20 comprises a pair of correlators 30, 32 coupled to RF antenna 40 for receiving signals transmitted from the transmitting radio and performing a pattern match of the incoming signal 42 to determine whether the signal is indicative of a frequency hopping mode (module 30) or a single frequency mode (module 32) of operation. That is, correlator 30 is configured to sense a first synchronization pattern in a signal transmission 42 from a transmitting radio indicative of a frequency hopping transmission of information. In contrast, correlator 32 is configured to sense a second synchronization pattern in the signal transmission which indicates that a single frequency transmission is forthcoming. Processor 50 is coupled to each of the correlators for receiving a signal output from the respective modules indicating the nature of the received transmission. Processor 50 includes hardware and software functionality for adaptively performing frequency selection and determining the mode (i.e. FH or single frequency mode) of operation of the radio. Processor 50 further includes an estimator circuit of a conventional type for measuring the SNR of the channel and estimating the interference energy

associated with the particular frequency channel. Memory module 80, such as a RAM, is operable for storing frequency hopping data parameters, including the number of frequencies/frequency channels estimated or listened to by the receiver over a particular time interval t , as well as threshold parameters indicative of the quality of the frequency channels. Comparator circuit 60 is coupled to estimator 55 for comparing the estimated interference energy on each particular frequency channel on which the receiver is tuned to with a receiver threshold value $R1$ stored in memory 70. If the estimated energy level exceeds the $R1$ threshold value, that channel is deemed "noisy", and a parameter representing the number of perceived "noisy" frequency channels is updated and stored in memory 70. The comparator then compares the number of frequencies in the hop set exceeding the $R1$ value with a second threshold value $R2$ in order to assess the overall quality of the FH communication network. If the number of "noisy" channels exceeds the predetermined $R2$ threshold, then the comparator provides a control signal 29 to control unit 80 which indicates that the overall receiver channel quality is unacceptable for frequency hopping transmission. Control unit 80, in response to the control signal operates to change the mode of operation of the radio from FH to single frequency mode. In this manner, the processor operates to maintain and update statistical parameters associated with interference on each frequency in which the receiver is tuned to, in order to determine the overall interference associated with the channels in the frequency hopping system. When the processor determines that the level of interference is

sufficiently great (i.e. exceeds a predetermined percentage of the frequency channels within the hop set) the processor is operable to cause the radio to switch to a single frequency mode. A flow chart depicting the above described operation is provided in FIG. 5. In this manner, when the transmitter associated with this radio performs a signal transmission, such transmission will occur in a single frequency mode of operation. Note that while a specific decision making scheme has been shown for determining the quality of frequency hopping transmissions, numerous other statistical analyses are capable of implementation within processor 50. For example, such statistical analysis may include sampling of the last N frequencies within a given time interval in order to determine the overall acceptability of FH communications, or may also require accumulation of information on at least N frequency channels within the hop set before making a determination regarding the acceptability of the FH communication mode.”).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Rodgers** in view of **Mortimer**.

Rodgers disclose all subject matter, except receiving a plurality of network data packets, determining if the plurality of network data packets include erroneous data and correcting the erroneous data and arrogating the plurality of network data packets into a single protocol data unit. The examiner takes Official Notice that receiving a plurality of network data packets, determining if the plurality of network data packets include erroneous data and correcting the erroneous data and arrogating the plurality of network data packets into a single protocol data unit is old and well know. **Mortimer** is evidence as such, it is at least over 20 years old and not invented by applicant.

Hence, it would have been obvious to one ordinary skill in the art at the time the claimed invention was made to incorporate the old and well know use of receiving a plurality of network data packets, determining if the plurality of network data packets include erroneous data and correcting the erroneous data and arrogating the plurality of network data packets into a single protocol data unit in the method of **Rodgers** in order to correct a single bit error occurring in a sequence of data packets.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lee, et al, Jesse, et al, and Cervinka, et al disclose the claimed invention as stated in claim 1.

11. Replacement Notice: Copies of Patent Application Records will be Provided in both Electronic and Paper Form

The Official Gazette notice, published on August 24, 2004 entitled "*All Electronic Copies of Patent Application Records Will Now Be Provided as Certified Copies in Electronic Form*" (1285 Off. Gaz. Pat. Off, August 24, 2004) is hereby rescinded. The USPTO is reinstating, until further notice, the procedures in effect prior to July 30, 2004 for providing certified copies of patent application records with paper certification statements. The USPTO will also offer electronic certified copies of patent application records at the requester's option.

Certified Copies with Paper Certification

Unless otherwise requested, certified copies of patent application records provided pursuant to 37 CFR 1.19 (b) will be produced with a paper certification statement, continuing the practice in effect prior to July 30, 2004. The certification statement will include an embossed seal and original signature.

Certified Copies with Electronic Certification

Customers ordering certified copies of patent applications as filed or patent-related file wrapper and contents of published applications from the USPTO website will have the option to choose electronic copies with electronic certification. These files include an imaged certification statement as part of a PDF file containing the document TIFF images. These electronic files are digitally signed by the USPTO for authenticity and integrity, and cannot be undetectably modified. Customers may choose to download these electronic files from the USPTO website or receive them on compact disc.

Paris Convention for the Protection of Industrial Property and Priority

Irrespective of whether the USPTO provides a paper certified copy or an electronic certified copy, Article 4(d)(3) of the Paris Convention prohibits any country that is a member of the convention from requiring further authentication of the certified copy for purposes of claiming priority under the Paris Convention. (The text of the Paris Convention and a list of its members are available at www.wipo.int/treaties/en/ip/paris/index.html.)

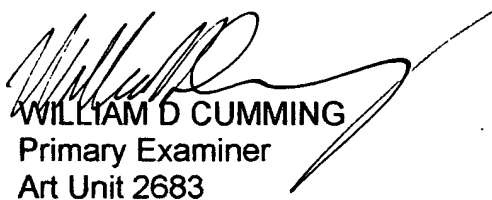
The USPTO is working with other intellectual property offices to encourage the acceptance of priority documents in electronic form with electronic certification. A list of offices and international intellectual property organizations that have agreed to accept electronic certified copies will be posted on the USPTO website soon, and updated regularly.

Questions should be directed to the Office of Public Records by email to opr@uspto.gov or by telephone at (703) 308-9743.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **WILLIAM D CUMMING** whose telephone number is 571-272-7861. The examiner can normally be reached on Tuesday & Wednesday, 10:30am to 8:30pm,.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

13. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


WILLIAM D CUMMING
Primary Examiner
Art Unit 2683

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